Greenleaf POWER

CAPITAL REQUEST APPROVAL FORM

Original [X]
Revision [ ]

Location: Desert View Power
Project Number: 3029-00-145
Project Name: MACT compliance project
Project Type:

Project Description Summary - Purpose and Benefit:

EPA Boiler MACT regulations require that DVP meet hydrochloric acid emissions limits of 0.022 lb/MMBtu. Based on recent testing, DVP emissions are 4-5 times that limit. The project will consist of two storage vessels, an injection system and all necessary piping and equipment for injecting hydrated lime upstream of the baghouse to bring emissions into compliance with the MACT regulations.

Submitted By: M. Martin
Date Submitted:

Project Start Date: Jul-15
Construction Start Date: Jan-16
Service Start Date: Mar-16
Project Completion Date: Mar-16

Budgeted Project: Yes[X] No [ ]
If yes, $ Amount in Annual Budget ($000): $1,200

PROJECT COST ESTIMATE:

Materials and Outside Labor (Description):	Amount	Total
Nol-Tec turnkey for complete injection system, taxes included	$ 1,105,159	
Spare parts	$ 36,000	
Performance bond	$ 13,262	
Subtotal-Materials and Outside Labor		$ 1,154,421
Other Project Costs (Description):		
Site demolition to clear project area	$ 43,000	
Subtotal-Other Project Costs		$ 43,000
SUBTOTAL		$ 1,197,421
Engineering	0.0%	-
Contingency and Estimating Allowance	0.0%	-
Interest During Construction	0.0%	-
SUBTOTAL		$ -
TOTAL ESTIMATED COST OF PROJECT		$ 1,197,421

APPROVALS: Signature and Date

Board Member
President
Controller
Senior VP, Operations — 8/11/15
Plant Manager — Aug 19 2015
Originator

For Corporate Use Only:

[X] Project Approved
[ ] Project Declined
Notification Date:
[ ] Further Action Required:

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CAPITAL REQUEST ANALYSIS FORM

Original [X]
Revision [ ]

Location: Desert View Power Project Number:

Project Name: MACT compliance project Project Start Date: Jul-15

18 MONTH CASH FLOW AND PROJECT COMPLETION SCHEDULE:

	Carryover	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
Expenditures ($ 000)			$ 231	$ 124	$ 124	$ 124	$ 124
Cumulative % Complete	0%	0%	19%	30%	40%	50%	61%
	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16
Expenditures ($ 000)	$ 124	$ 115	$ 115	$ 115		$ -	$ -
Cumulative % Complete	71%	81%	90%	100%	100%	100%	100%
	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Forward	TOTAL
Expenditures ($ 000)	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,197
Cumulative % Complete	100%	100%	100%	100%	100%	100%	

FINANCIAL IMPACT SUMMARY: (Derived from Proforma Income Statement)

Annual Savings	$ -	Debt Coverage Average	
Increase in annual volume: Sales	$ -	Debt Coverage Minimum	
R.O.A. before tax		Equity Payback	$ -
I.R.R. after tax		Change in energy efficiency	

ADDITIONAL CORPORATE SUPPORT REQUIRED:

[ ] Service Interruptions
[ ] Plant Shutdowns
[ ] Additional Personnel
[ ] Customer Agreements
[ ] Street Openings
[ ] Right-of-Way Issues
[ ] Zoning Issues
[X] Environmental Assessments
[ ] Water/Land/Air Easements
[X] Regulatory Approval
[ ] Special Permits
[ ] Safety
[ ] Other: _____
[ ] Other: _____

SUPPORTING SCHEDULES: (Please List and Attach)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

POST COMPLETION DATE OF REVIEW: _____

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CAPITAL REQUEST NARRATIVE SUMMARY

Original [x]
Revision [ ]

Location: **Desert View Power** Project Number: _____

Project Name: MACT compliance project Project Start Date: Jul-15

Background:

EPA MACT regulations will go into effect in April 2016. DVP currently complies with all limits except hydrochloric acid (HCl), which is 0.022 lb/MMBtu. Testing in December 2014 showed emissions limits at slightly over 0.10 lb/MMBtu.

Description:

The proposed system will include a bulk storage truck and vertical silo for hydrated lime storage. The system includes material transfer blowers between storage areas and flue gas, all necessary piping, electrical and controls. The pricing includes all installation and start-up costs.

Implementation:

Nol-Tec systems will be the lead EPC for the project and will subcontract installation services from Trinity Construction. Nol-Tec will provide all engineering and design, equipment, installation drawings, startup services as well as project documents. Trinity is an established contractor at DVP and has played an integral role in scheduled outages for many years.

Capital Cost:

Three additional vendors submitted budgetary proposals, and two of those submitted detailed quotes for the project. Due to difficult geotechnical requirements, several rounds of design review were necessary to arrive at the current price. Nol-Tec's proposal was the lowest cost and comes with strong industry recommendations.

Benefits:

With the addition of the dry sorbent injection (DSI) system, DVP will be able to maintain compliance with EPA's MACT regulations.